



United States  
Department of  
Agriculture

Soil  
Conservation  
Service



United States  
Department of  
Commerce

National  
Oceanic and  
Atmospheric  
Administration

National  
Weather  
Service

---

**May 1, 1985**

---

CONTIN

# Water Supply Outlook for the Western United States

---

7

# Water Supply Outlook

Published jointly by the National Weather Service NOAA and the Soil Conservation Service USDA following the principal snow survey dates from January 1 through May 1.

Copies of this publication may be obtained on request from National Weather Service, National Oceanic and Atmospheric Administration, Silver Spring, Maryland 20910, Attention Office of Hydrology, and the Soil Conservation Service, Western Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Some Basic Data and Streamflow Forecasts prepared by cooperating agencies are presented in this bulletin. These agencies include the Bureau of Reclamation, Corps of Engineers, Forest Service, National Park Service, Geological Survey, British Columbia Ministry of the Environment, and the California Department of Water Resources.

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 38, Sacramento, California 95802 — for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 — for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 — and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Water Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.

## To Recipients of Water Supply Outlook Reports

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Fall precipitation influences the soil moisture conditions prior to formation of snowpack and explains, in part, the effectiveness of the snowpack in producing runoff. The forecast of natural runoff in this outlook are based principally on measurements of precipitation, snow water equivalent, and antecedent runoff. Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

### Probability Forecasts

Precipitation and snowfall accumulation of known probability as determined by analysis of past records are utilized in the preparation of probability runoff forecasts. The forecasts include an evaluation of the standard error of the prediction model. The forecasts are presented at three levels of probability as follows:

1. Most Probable — That runoff which is expected to occur if precipitation subsequent to the date of forecast is median.
2. Reasonable Maximum — That runoff which is expected to occur if precipitation subsequent to the date of forecast is equal to the amount which is exceeded on the average once in ten years.
3. Reasonable Minimum — That runoff which is expected to occur if precipitation subsequent to the dates of forecast is equal to the amount which is exceeded on the average nine out of ten years.

RUNOFF FORECASTS AT ALL POINTS ARE FOR FULL NATURAL OR UNIMPAIRED RUNOFF CORRECTED FOR EVAPORATION, UPSTREAM DIVERSIONS, AND ADJUSTED FOR OTHER HYDROLOGIC CHANGES AS THEY ARE DEVELOPED. REFERENCE SHOULD BE MADE TO THE U.S. GEOLOGICAL SURVEY WATER SUPPLY PAPERS FOR DETAILED INFORMATION CONCERNING DIVERSIONS AND ADJUSTMENTS AT THE VARIOUS FORECAST POINTS.

## 1985 Snowmelt Season

as of May 1

WARM AND DRY APRIL WEATHER OVER MUCH OF THE WEST STARTED HEAVY SNOWMELT WHICH SEVERELY DEPLETED SNOWPACKS, CAUSED HIGH STREAMFLOWS, AND LED TO DOWNWARD REVISIONS IN THE SEASONAL FORECASTS. STREAMS IN SOUTHERN COLORADO AND NEW MEXICO WILL PRODUCE MUCH ABOVE NORMAL RUNOFF VOLUMES THIS SEASON.

## General Outlook

April weather conditions contributed to further decrease streamflow forecasts over a large portion of the West. Expected volumes are below to much below normal for the Missouri, Great, and California Basins. Also, portions of the Snake and Upper Columbia Basins will receive below normal runoff amounts. Conditions in the Colorado, Arkansas, and Rio Grande Basins were not so bleak, however. Wet April conditions will keep most of these basins above average, especially so in the San Juan and Rio Grande drainages.

A very warm and dry April weather pattern dominated much of the Western U.S. California stations only reported 15 percent of normal precipitation state-wide, with the Missouri, the Great, and much of the Columbia Basins showing similar results. On the other hand, the Colorado, Arkansas, and Rio Grande Basins received above normal precipitation during April. The Rio Grande Basin experienced the wettest April in 40 years.

As previously mentioned, a very warm April has greatly depleted the snowpack throughout the West. The very rapid depletion of the snow caused high runoff in most western streams and rivers during April, with many peaks probably occurring during the month. The only area with a much above normal snowpack is in the high elevation portions of southern Colorado and northern New Mexico, where rapid melting is just getting underway.

The Rio Grande River is going bananas this year and is now expected to produce 195 percent of average seasonal runoff. This is in stark contrast with other major rivers in the West, where forecasts are either staying the same or decreasing. Percent yields from other major rivers are as follows: Snake-98, Missouri-82, Columbia-96, Colorado-145, Arkansas-98, Green-88, North Platte-68, and South Platte-100.

Reservoir storage is good to excellent throughout the West. The way things look in many states, the water users are going to have to rely heavily on this abundance of stored water.

## Basin by Basin Summary

### SAN JOAQUIN, SACRAMENTO AND NORTH COASTAL BASINS

Following a cool and damp March in much of California, April weather patterns reverted to the dry conditions which have prevailed most of the winter. Statewide precipitation averaged about 15 percent of normal. Only a few sites in the state reported more than an inch of precipitation. Mt. Shasta City and Red Bluff reported their second driest April on record. Several locations in the Southern Sierra and Southern California recorded no rain during the month.

April had very warm temperatures throughout the state, with every reporting station in California recording above normal temperatures for the month. Average temperature anomalies of 3 to 5 degrees were most common for the month. Record April average temperatures were established at Blue Canyon with 53.4 degrees (10.1 degrees above normal) and at Mt. Shasta City with 51.7 degrees (6.1 degrees above normal). The Blue Canyon April average temperature was higher than the normal May average of 51.5 degrees.

As a result of the warm weather, the runoff from the snowpack began earlier than usual giving higher than normal streamflows for the month. However, expected water year streamflow volumes have continued to decrease and are expected to average 63 percent of normal.

### COLUMBIA BASIN

The water supply outlook for the Columbia River and Pacific coastal basins calls for near normal runoff volumes this season. The conditions of April boosted forecast volumes in the Canadian portion of the basin and lowered forecast volumes in the Snake River Basin. The forecast for the Columbia River at The Dalles remained

## COLUMBIA BASIN -- Continued

Most basin reservoirs will fill, but with continued dry weather and high irrigation demand, it may be difficult to fill the Yakima and Boise reservoir systems.

## GREAT BASIN

Below normal April precipitation in the Great Basin combined with very high flows during April, resulted in lower runoff volumes for the May-July period. The dry warm April weather lowered the threat of flooding and minimized the danger of slides.

April precipitation throughout the basin was generally 20-45 percent of normal but increased to 120-170 percent of normal in southern and eastern Utah.

Seasonal precipitation since October 1 is below normal, 50-80 percent, over portions of north-central Utah but increases substantially to more than 150 percent over the southeast portion of the state.

The May 1 snow measurements reflect the unusually warm weather in April which resulted in a significant decline in the mountain snowpack. Most basin averages declined 10-40 percent from the April 1 readings.

Observed streamflow throughout the Great Basin was much above normal. Most streams had 2-3 times normal flows reflecting the early snowmelt. Many of these streams have already peaked for this season. Since October 1 runoff over most of the Great Basin has been 160-200 percent of normal.

The elevation of the Great Salt Lake on May 1 was 4209.90 feet, an increase of 0.35 feet during April. The Great Salt Lake is 1.80 feet higher than last years May 1 reading and is at its highest level since 1877. The lake should continue to rise slowly, peaking within the next few weeks at a level near or below 4210.20 feet. The peak last year was 4209.25 feet.

Utah Lake on May 1st was 3.28 feet above compromise, a rise of 0.34 feet during April. Utah Lake is very near its peak elevation, within several inches, and should start receding within the next several weeks.

Reservoir storage throughout Utah remains well above average. April month-end contents of 24 reservoirs was about 340,000 acre-feet more than last year at this time.

The flood potential continues to diminish with dry warm weather helping to decrease the snowpack and drying the soils. Many low elevation streams throughout the state have already peaked. High flows from snowmelt runoff are still likely but streams are expected to remain within stream channels. The potential for land slides and earth failures has greatly diminished.

## COLORADO BASIN

The water supply outlook for the Upper Colorado Basin is above normal. Forecast flows increased 5 to 15 percent over those issued April 1. Runoff volumes are forecast at 130-170 percent of normal for the May-July period on the San Juan, Dolores, and Gunnison watersheds as well as the Colorado mainstem from Cameo to Lake Powell. The Green River Basin and headwaters of the Colorado changed only slightly.

April precipitation ranged from less than 50 percent of normal on the Upper Green River in Wyoming to about 200 percent of average over much of the Colorado mainstem and San Juan Basin. Some areas along the Continental Divide were near normal. Seasonal precipitation was quite varied over the Upper Colorado Basin. Portions of the Upper Green River in Wyoming received less than 50 percent with a vast majority of the Colorado drainage 110 to 140 percent with some stations exceeding 150 percent in the San Juan and Dolores watersheds.

The May 1 mountain snowpack as compared to April 1 declined to about 65 percent of average in the Upper Green, changed only slightly over Colorado mainstem, but increased significantly in the San Juan Basin.

Runoff during April was generally at record proportions for the month. Warm weather resulted in an early snowmelt regime with many drainages having flows more than 200 percent of normal. The April inflow to Navajo Reservoir was a record amount at 340,000 acre-feet, while the inflow to Lake Powell was 2.55 million acre-feet, second highest on record.

Reservoir storage remains high. The combined storage of ten major reservoirs above Lake Powell is 6.1 million acre-feet, about 330,000 acre-feet more than last year at this time. Storage in the four Salt River reservoirs in Arizona is 1.7 million acre-feet, almost 100 percent of capacity. Current storage in Lake Powell is 22.5 million acre-feet, 300,000 acre-feet more than last year.

Some flooding in low lying and flood prone areas may occur on the San Juan, Dolores, and Gunnison drainages as well as the Colorado mainstem below the confluence with the Gunnison River.

## RIO GRANDE BASIN

Above normal precipitation was reported over the entire Rio Grande Basin during the month of April, increasing the total seasonal streamflow forecasts at some forecast points by 10 to 20 percent from April 1 predictions. Forecast totals in the Colorado portion of the basin are 107 to 160 percent of average, and in New Mexico 110 to 215 percent of average.

During the last week of April, significant precipitation was observed at many basin locations pushing monthly totals above 200 percent of normal throughout the basin. Overall, it was one of the wettest Aprils in the last 40 years in New Mexico.

Above normal snowfall was reported during the month of April in the higher elevation areas, particularly the San Juan Mountains of southern Colorado. The basin snowpack in Colorado is now 153 percent of average which is about 20 percent higher than last year at this time. In New Mexico, above normal temperatures around the middle of the month resulted in melting of a large percentage of the snowpack. This produced very good runoff and much above normal streamflows for the month.

Reservoir storage increased at most of the basin lakes during the month, and total storage is well above average. At Elephant Butte and Caballo Reservoirs, water in storage now totals about 1.9 million acre-feet which is the highest amount since the record high of 2.3 million acre-feet in 1942.

## ARKANSAS BASIN

The Arkansas River Basin water supply outlook indicates near normal runoff. Predicted streamflow volumes range from 105 to 115 percent of the 20-year (1961-1980) average.

Several moderate storms during April produced above normal precipitation, with the majority of the basin receiving 150 percent of normal. Seasonal totals (October through April) range from near normal in the northern valleys to near twice normal further south and east along the Sangre De Cristo Mountains and the southeastern quarter of Colorado.

May 1 snowpack increased slightly from a month ago at a few of the higher elevation snow courses. Snowpack at the low and middle elevation snow courses decreased dramatically due to above normal temperatures during the month of April. North and west of Salida in the Sawatch mountains, May 1 highs were noted at Porphyry Creek and Twin Lakes tunnel with averages of 110 to 120 percent of normal. At lower elevations, the snowpack is virtually non-existent due to above normal temperatures in April.

# STREAMFLOW FORECASTS

STREAM AND STATION	FORECAST PERIOD	FORECASTS THIS YEAR				20 YEAR (1961-80) AVERAGE RUNOFF (1000 AF)
		MOST PROBABLE (1000AF)	(PERCENT OF AVG.)	REASONABLE MAX. (PERCENT OF AVG.)	REASONABLE MIN. (PERCENT OF AVG.)	
SACRAMENTO AND NORTH COASTAL BASINS						
TRINITY RIVER						
CLAIR ENGLE LAKE INFLOW, CA	OCT-SEP	850	62	70	56	1365
SACRAMENTO RIVER						
SHASTA RESERVOIR ABV, CA	OCT-SEP	500	59	70	50	844
MC CLOUD RIVER						
SHASTA RESERVOIR ABV, CA	OCT-SEP	900	70	77	64	1280
PIT RIVER						
SHASTA RESERVOIR ABV, CA	OCT-SEP	2250	69	73	66	3266
SACRAMENTO RIVER						
SHASTA RESERVOIR INFLOW, CA	OCT-SEP	4000	66	70	64	6078
RED BLUFF NR, CA	OCT-SEP	5300	60	66	55	8808
NORTH FORK FEATHER RIVER						
PRATTVILLE, NR, CA	OCT-SEP	580	73	77	70	793
BIG BAR, CA	OCT-SEP	1600	62	68	57	2572
FEATHER RIVER						
OROVILLE RESERVOIR INFLOW, CA	OCT-SEP	2800	61	68	56	4613
NORTH YUBA RIVER						
GOODYEARS BAR BLO, CA	OCT-SEP	350	62	71	55	564
SOUTH YUBA RIVER						
LANGS CROSSING, CA	OCT-SEP	250	70	82	61	358
YUBA RIVER						
SMARTVILLE, CA	OCT-SEP	1500	64	71	59	2355
MIDDLE FORK AMERICAN RIVER						
AUBURN NR, CA	OCT-SEP	680	64	76	56	1066
SILVER CREEK						
UNION VALLEY RES INFLOW, CA	OCT-SEP	110	65	76	56	170
CAMINO DIV DAM BLO, CA	OCT-SEP	210	67	79	57	314
SOUTH FORK AMERICAN RIVER						
CAMINO NR, CA	OCT-SEP	500	61	71	54	822
AMERICAN RIVER						
FOLSOM RESERVOIR INFLOW, CA	OCT-SEP	1700	65	72	61	2623
SAN JOAQUIN BASIN						
KERN RIVER						
KERNVILLE NR, CA	OCT-SEP	400	66	79	54	610
ISABELLA DAM BLO, CA	OCT-SEP	450	60	69	57	749
BAKERSFIELD NR, CA	OCT-SEP	480	61	77	53	783
TULE RIVER						
SUCCESS RESERVOIR INFLOW, CA	OCT-SEP	70	48	69	31	147
KAWEAH RIVER						
TERMINUS RESERVOIR INFLOW, CA	OCT-SEP	280	62	72	56	453
NORTH FORK KINGS RIVER						
CLIFF CAMP NR, CA	OCT-SEP	200	68	80	62	292
KINGS RIVER						
PINE FLAT DAM INFLOW, CA	OCT-SEP	1150	67	74	63	
SOUTH FORK SAN JOAQUIN RIVER						
FLORENCE LAKE NR, CA	OCT-SEP	180	68	79	57	
BIG CREEK						
HUNTINGTON LAKE BLO, CA	OCT-SEP	75	54	68	43	
SAN JOAQUIN RIVER						
BIG CREEK ABV, CA	OCT-SEP	1000	72	77	69	
MILLERTON LAKE INFLOW, CA	OCT-SEP	1200	66	74	62	
MERCED RIVER						
POHONO BR, YOSEMITE NR, CA	OCT-SEP	320				
LAKE MC CLURE INFLOW, CA	OCT-SEP	600				
TUOLUMNE RIVER						
HETCH HETCHY NR, CA	OCT-SEP	560	73	81	70	762
DON PEDRO RES INFLOW, CA	OCT-SEP	1250	66	73	62	1885
MIDDLE FORK STANISLAUS RIVER						
SAND BAR FLAT, AVERY NR, CA	OCT-SEP	320	67	77	59	480
STANISLAUS RIVER						
MELONES RESERVOIR INFLOW, CA	OCT-SEP	700	61	70	56	1142
NORTH FORK MOKELUMNE RIVER						
SALT SPRINGS DAM BLO, CA	OCT-SEP	260	73	99	45	358
MOKELUMNE RIVER						
PARDEE RESERVOIR INFLOW, CA	OCT-SEP	470	64	73	59	735
COSUMNES RIVER						
MICHIGAN BAR, CA	OCT-SEP	170	47	60	38	365
COLUMBIA BASIN						
COLUMBIA RIVER						
BIRCHBANK, BC	APR-SEP	40900	92	109	74	44610
INTERNATIONAL BOUNDARY	APR-SEP	56200	91	108	75	61430
GRAND COULEE, WA	APR-SEP	61000	91	101	82	66840
ROCK ISLAND DAM BLO, WA	APR-SEP	66700	92	103	80	72780
THE DALLES NR, OR	APR-SEP	96900	96	109	83	101000
KOOTENAI RIVER						
LIBBY RESERVOIR INFLOW, MT	APR-SEP	5860	83	103	64	7041
LIBBY, MT	APR-SEP	6230	83	102	64	7503
LEONIA, ID	APR-SEP	7320	85	104	66	8602

# STREAMFLOW FORECASTS

STREAM AND STATION	FORECAST PERIOD	FORECASTS THIS YEAR				20 YEAR (1961-80) AVERAGE RUNOFF (1000 AF)
		MOST PROBABLE (1000AF) (PERCENT OF AVG.)	REASONABLE MAX. (PERCENT OF AVG.)	REASONABLE MIN. (PERCENT OF AVG.)		
COLUMBIA BASIN --- Continued						
CLARK FORK						
MISSOULA ABV, MT	MAY-SEP	1270	80	116	44	
MISSOULA BLO, MT	APR-SEP	2710	82	105	58	
ST. REGIS, MT	APR-SEP	3690	84	104	63	
PLAINS NR, MT	APR-SEP	10800	89	104	74	
WHITEHORSE RAPIDS, ID	APR-SEP	12200	90	104	75	
PEND OREILLE RIVER						
PEND OREILLE LAKE IN, ID	APR-SEP	13800	91	106	77	
BOX CANYON BLO, WA	APR-SEP	14000	91	106	76	
BLACKFOOT RIVER						
BONNER NR, MT	APR-SEP	797	80	109	50	
BITTERROOT RIVER						
DARBY NR, MT	APR-SEP	470	81			
AT MOUTH, MT	APR-SEP	1250	83	120	47	
N.F. FLATHEAD RIVER						
COLUMBIA FALLS NR, MT	MAY-SEP	1520	87	116	59	
FLATHEAD RIVER						
COLUMBIA FALLS, MT	MAY-SEP	4900	87	107	67	
FLATHEAD LAKE INFLOW, MT	MAY-SEP	5740	88	108	68	
M.F. FLATHEAD RIVER						
WEST GLACIER NR, MT	MAY-SEP	1500	88	117	59	
S.F. FLATHEAD RIVER						
HUNGRY HORSE RES INFLOW, MT	MAY-SEP	1810	89	110	68	
PRIEST RIVER						
PRIEST RIVER, ID	APR-SEP	899	102	132	71	
KETTLE RIVER						
LAURIER NR, WA	APR-SEP	1520	83	109	57	
COEUR D'ALENE RIVER						
ENAVILLE, ID	MAY-SEP	564	102	149	55	
COEUR D'ALENE LAKE IN, ID	MAY-SEP	2070	105	140	70	
SPOKANE RIVER						
SPOKANE, WA	MAY-SEP	2260	106	138	74	
ST JOE RIVER						
CALDER, ID	MAY-SEP	1020	100	124	77	
OKANAGAN RIVER						
TONASKET NR, WA	APR-SEP	1370	83	104	68	
SIMILKAMEEN RIVER						
NIGHTHAWK NR, WA	APR-SEP	1280	88	103	79	
METHOW RIVER						
PATEROS NR, WA	APR-SEP	822	84	108	59	
STEHEKIN RIVER						
STEHEKIN, WA	APR-SEP	690	80			
CHELAN RIVER						
LAKE CHELAN INFLOW, WA	MAY-SEP	893	82	99	65	
WENATCHEE RIVER						
PESHASTIN, WA	MAY-SEP	1370	90	123	56	
YAKIMA RIVER						
KEECHELUS LAKE INFLOW, WA	MAY-SEP	108	95	106	83	
CLE ELUM, WA	MAY-SEP	738	94	106	83	
PARKER NR, WA	MAY-SEP	1620	95	114	76	
KACHESS RIVER						
KACHESS LAKE INFLOW, WA	MAY-SEP	93	95	107	83	
CLE ELUM RIVER						
CLE ELUM LAKE INFLOW, WA	MAY-SEP	379	95	105	85	
IVER						
NR, WA	MAY-SEP	750	102	124	81	
RIVER						
KE INFLOW, WA	MAY-SEP	126	99	118	80	
	Y-SEP	220	103	122	84	
		37	95	136	54	
		750	85	97	74	
HEISE NR, ID	APR-SEP	3150	83	101	65	
SHELLEY NR, ID	MAY-SEP	2940	79	99	59	
BLACKFOOT NR, ID	APR-JUL	3630	82	101	64	
AMERICAN FALLS RES IN, ID	MAY-JUL	3240	80	98	62	
KING HILL, ID	APR-JUL	2390	78	106	50	
MURPHY NR, ID	APR-JUL	2820	101	129	86	
WEISER, ID	APR-JUL	3100	107	140	88	
HELLS CANYON, ID	APR-JUL	5420	103	144	71	
LOWER GRANITE RES IN, WA	APR-JUL	5950	101	139	71	
GREY'S RIVER	APR-JUL	21700	98	122	77	
PALISADES ABV, WY						
SALT RIVER	APR-SEP	300	76			
ETNA NR, WY						
HENRYS FORK	APR-SEP	311	79	95	62	
ASHTON NR, ID						
REXBURG NR, ID	MAY-SEP	490	80	105	83	
	MAY-SEP	1030	78	105	75	

STREAMFLOW FORECASTS

STREAM AND STATION	FORECAST PERIOD	FORECASTS THIS YEAR				20 YEAR (1961-80) AVERAGE RUNOFF (1000 AF)
		MOST PROBABLE (1000AF)	(PERCENT OF AVG.)	REASONABLE MAX. (PERCENT OF AVG.)	REASONABLE MIN. (PERCENT OF AVG.)	

COLUMBIA BASIN -- Continued						
FALLS RIVER						
SQUIRREL NR, ID	APR-JUL	345	94	105	83	366
TETON RIVER						
ST. ANTHONY NR, ID	APR-SEP	428	92	103	81	465
BIG LOST RIVER						
MACKAY RESERVOIR INFLOW, ID	APR-SEP	129	70	104	36	184
LITTLE LOST RIVER						
HOWE NR, ID	APR-SEP	38	90			42
PORTNEUF RIVER						
TOPAZ, ID	MAR-SEP	94	92	92	92	102
GOOSE CREEK						
OAKLEY RES INFLOW, ID	MAY-SEP	17	76	109	41	23
SALMON FALLS CREEK						
SAN JACINTO NR, NV	MAY-SEP	45	74	133	34	61
LITTLE WOOD RIVER						
CAREY NR, ID	MAY-SEP	46	61	97	26	75
BIG WOOD RIVER						
HAILEY, ID	APR-SEP	175	68	110	60	258
MAGIC RESERVOIR INFLOW, ID	APR-SEP	268	87	129	45	307
BRUNEAU RIVER						
HOT SPRING NR, ID	MAY-SEP	123	70	123	20	176
OWYHEE RIVER						
GOLD CREEK NR, NV	MAY-JUL	27	113	175	63	11
OWYHEE RES INFLOW, OR	MAY-JUL	130	70	194	30	187
BOISE RIVER						
TWIN SPRINGS NR, ID	APR-JUL	557	86	102	69	650
BOISE NR, ID	MAY-JUL	858	76	100	52	1131
S.F. BOISE RIVER						
ANDERSON RANCH RES IN, ID	APR-JUL	457	83	102	64	551
MALHEUR RIVER						
DREWSEY NR, OR	MAY-JUL	25	76	185	46	33
N.F. MALHEUR RIVER						
BEULAH RESERVOIR INFLOW, OR	MAY-JUL	27	75	136	45	36
PAYETTE RIVER						
HORSESHOE BEND NR, ID	MAY-SEP	1230	82	102	61	1504
DEADWOOD RIVER						
DEADWOOD RES INFLOW, ID	APR-JUL	120	86	103	69	140
N.F. PAYETTE RIVER						
CASCADE RES INFLOW, ID	MAY-SEP	381	82	98	65	466
WEISER RIVER						
WEISER NR, ID	MAY-JUL	188	71	119	24	263
BURNT RIVER						
HEREFORD NR, OR	APR-SEP	50	147	197	97	34
POWDER RIVER						
SUMPTER NR, OR	APR-JUL	68	121	152	91	56
EAGLE CREEK						
SKULL CREEK ABV, OR	APR-SEP	208	113			184
IMNAHA RIVER						
IMNAHA, OR	MAY-SEP	239	96	129	63	249
SALMON RIVER						
SALMON, ID	APR-JUL	749	83	119	47	899
WHITEBIRD, ID	APR-JUL	5290	85	100	71	6211
LOSTINE RIVER						
LOSTINE NR, OR	APR-SEP	114	93			123
GRANDE RONDE RIVER						
LA GRANDE, OR	APR-SEP	162	100	156	44	162
TROY, OR	MAR-JUL	1410	97	124	70	1454
CLEARWATER RIVER						
OROFINO, ID	APR-JUL	4710	96	115	77	4917
SPALDING, ID	APR-JUL	7760	97	115	79	8000
N.F. CLEARWATER RIVER						
DWORSHAK RES INFLOW, ID	APR-JUL	2760	98	114	83	2805
S.F. WALLA WALLA RIVER						
MILTON NR, OR	MAY-SEP	51	98	123	73	52
UMATILLA RIVER						
GIBBON NR, OR	MAY-SEP	49	104	145	64	47
PENDLETON, OR	MAY-SEP	77	100	156	44	77
JOHN DAY RIVER						
SERVICE CREEK, OR	APR-SEP	1000	131	159	102	764
M.F. JOHN DAY RIVER						
RITTER, OR	MAY-SEP	74	100	138	62	74
N.F. JOHN DAY RIVER						
MONUMENT NR, OR	APR-SEP	720	134	134	134	539
OCHOCO CREEK						
OCHOCO RES INFLOW, OR	APR-SEP	27	152	240	65	18
CROOKED RIVER						
PRINEVILLE RES INFLOW, OR	APR-SEP	162	172	240	94	94
TUMALO CREEK						
BEND NR, OR	MAY-SEP	43	107	122	92	40
SQUAW CREEK						
SISTERS NR, OR	MAY-SEP	46	105	123	86	44

## ARKANSAS BASIN -- Continued

Reservoir storage amounts continue well above average with 406 percent of the long-term average now in storage. This is about 122 percent more than last year at this time.

## MISSOURI BASIN

The May 1 water supply forecast calls for most streams in the Missouri Basin to receive less runoff than forecast last month as a result of below average April precipitation.

The overall high elevation snowpack in the Missouri Basin is well below average for May 1. The snowpack in the South Platte Basin ranges from 70 to 90 percent of average. The North Platte Basin snowpack ranges from near 85 percent above Seminoe Dam, Wyoming, to 40 percent of average in the Sweetwater Basin. The snowpack in the Yellowstone Basin ranges from 61 percent in the Yellowstone Basin above Billings, Montana, to 38 percent of average in the Powder River Basin. Except for the Marias-Teton-Sun Basins, where the snowpack is 83 percent of average, the Missouri Basin above Fort Peck, Montana, has between 58 and 70 percent of average May 1 snowpack.

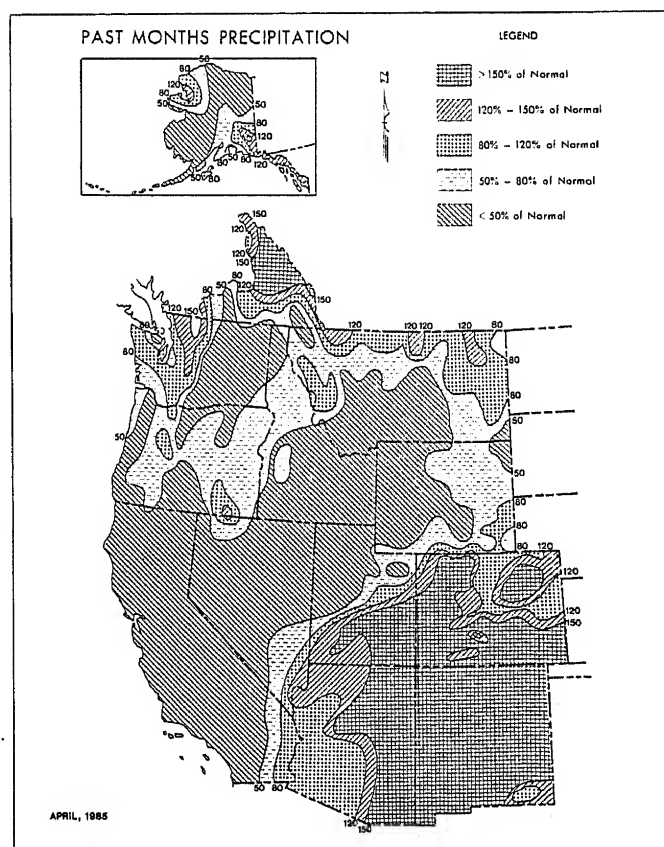
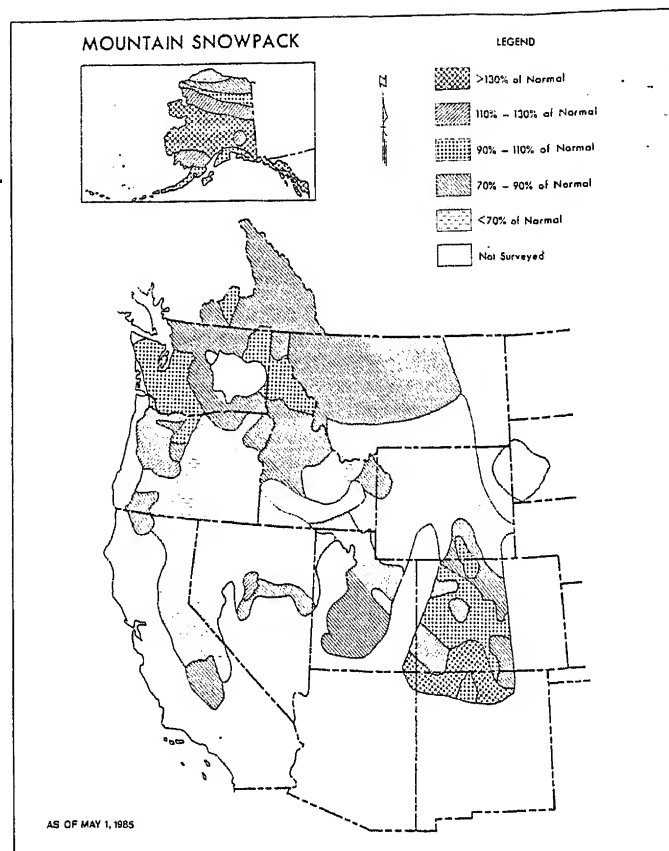
Most of the Missouri Basin received below average April precipitation. Except for the northeastern portion, Montana received below to well below average precipitation. Wyoming also received below to well below average April precipitation. The Platte Basin in Colorado received above average precipitation during April.

Most streams in the Missouri Basin are forecast to have below average runoff this spring and summer. Streams in the Missouri Basin above Fort Peck, Montana, can expect about 80 percent of average runoff. Streams in the Yellowstone Basin are forecast to have about 60 to 80 percent of average runoff, the Upper North Platte Basin 82 percent of average, the Lower North Platte Basin well below average runoff, and the South Platte Basin between 85 and 100 percent of average.

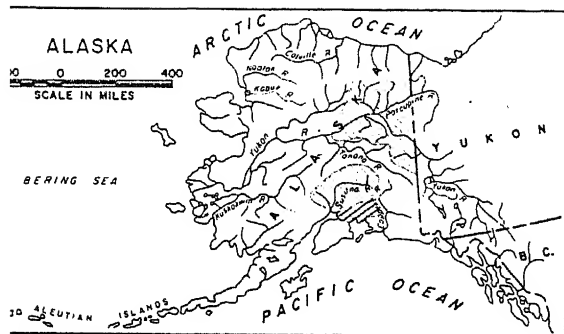
Most reservoirs in the Missouri Basin contain average or above average water for this time of the year. Reservoirs in Montana contain average storage except for Gibson, Pishkun, Willow Creek, Tongue, Sherburne, Fresno and Nelson Reservoirs which all have below average storage. Reservoir storage in Wyoming is above average in the North Platte Basin; average in the Wind, Bighorn Basin; and below average in the Bel Fourche Basin.

## ALASKA

Alaska experienced the coldest April on record. Although little new moisture fell during the month, very little snow melted either. The result is almost the entire state south of the Brooks Range is covered by snow far in excess of normal amounts for this time of year. The near maximum of record snowpack in the interior a month ago is now maximum of record in a large belt across the center of the state. The National Weather Service rates this year's potential for flooding during the river ice breakup season as the highest in the last 20 years.

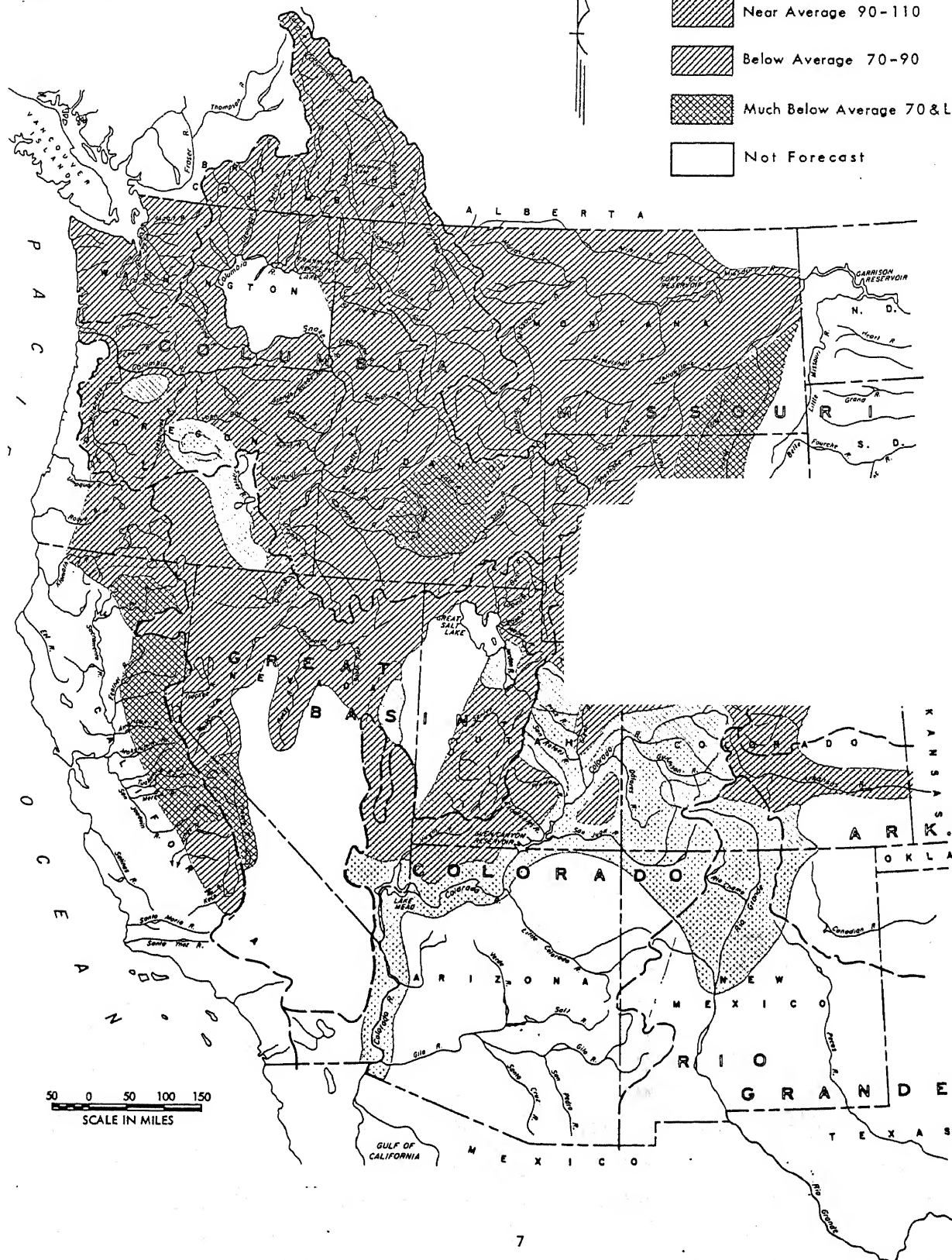
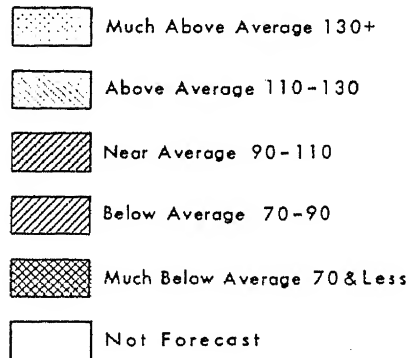






## SPRING AND SUMMER STREAMFLOW FORECASTS

### LEGEND



STREAMFLOW FORECASTS

STREAM AND STATION	FORECAST PERIOD	FORECASTS THIS YEAR				20 YEAR (1961-80) AVERAGE RUNOFF (1000 AF)
		MOST PROBABLE (1000AF)	REASONABLE MAX. (PERCENT OF AVG.)	REASONABLE MIN. (PERCENT OF AVG.)	REASONABLE MIN. (PERCENT OF AVG.)	

COLUMBIA BASIN (Cont.) AND COASTAL BASINS

DESCHUTES RIVER						
CRANE PRAIRIE INFLOW, OR	MAY-SEP	105	131	169	94	80
BENHAM FALLS, OR	APR-SEP	559	104			540
MOODY, OR	APR-SEP	1950	104	113	94	1874
LITTLE DESCHUTES RIVER						
LAPINE NR, OR	MAY-SEP	55	92	118	65	60
CRESCENT CREEK						
CRESCENT LAKE INFLOW, OR	APR-SEP	26	124	152	95	21
WHITE RIVER						
TYGH VALLEY BLO, OR	MAY-SEP	110	120	148	91	92
MCKENZIE RIVER						
VIDA NR, OR	APR-SEP	1390	115	115	115	1207
S. SANTIAM RIVER						
WATERLOO, OR	APR-SEP	655	113	113	113	578
N. SANTIAM RIVER						
MEHAMA, OR	APR-SEP	960	115	115	115	838
CLACKAMAS RIVER						
ESTACADA, OR	APR-SEP	841	110			767
WILLAMETTE RIVER						
SALEM, OR	APR-SEP	4740	102	102	102	4655
DUNGENESS RIVER						
SEQUIM NR, WA	APR-SEP	146	91			160
SKAGIT RIVER						
CONCRETE NR, WA	APR-SEP	5590	83	98	69	6724
COWLITZ RIVER						
MAYFIELD RES INFLOW, WA	MAY-SEP	1370	85	129	41	1617
CASTLE ROCK, WA	MAY-SEP	1750	85	134	36	2058
LEWIS RIVER						
ARIEL, WA	APR-SEP	1170	94	118	69	1249
N. UMPQUA RIVER						
LEMOLO LAKE INFLOW, OR	APR-SEP	167	107	117	97	156
ROGUE RIVER						
RAYGOLD, OR	MAY-SEP	663	103	133	74	642
WILLIAMSON RIVER						
SPRAGUE RIVER BLO, OR	MAR-SEP	552	113	146	80	489
KLAMATH RIVER						
UPPER KLAMATH LAKE IN, OR	APR-SEP	605	124	169	79	489
SPRAGUE RIVER						
CHILOQUIN NR, OR	MAR-SEP	292	103	142	64	284

GREAT BASIN

BEAR RIVER						
UTAH-WYOMING STATE LINE NR	MAY-JUL	110	105	119	94	105
WOODRUFF NARROWS RES IN UT	MAY-JUL	118	102	131	83	116
HARER, ID	APR-SEP	227	73	92	56	310
SMITHS FORK						
BORDER NR, WY	APR-SEP	93	78	89	69	119
THOMAS FORK						
WYOMING-IDAHO STATE LINE NR	APR-SEP	26	74			35
LOGAN RIVER						
LOGAN NR, UT	MAY-JUL	96	95	109	82	102
BLACKSMITH FORK						
HYRUM NR, UT	MAY-JUL	37	97	132	68	38
WEBER RIVER						
OAKLEY NR, UT	MAY-JUN	95	102	118	87	93
ROCKPORT RES INFLOW, UT	MAY-JUN	97	102	126	80	95
ECHO RESERVOIR INFLOW, UT	MAY-JUN	121	102	125	80	119
GATEWAY, UT	MAY-JUN	248	108	127	89	230
CHALK CREEK						
COALVILLE, UT	MAY-JUN	30	100	130	76	30
EAST CANYON CREEK						
EAST CANYON RES INFLOW, UT	MAY-JUN	22	138	176	119	15.6
SOUTH FORK OGDEN RIVER						
HUNTSVILLE NR, UT	MAY-JUN	33	81	110	58	41
OGDEN RIVER						
PINE VIEW RES INFLOW, UT	MAY-JUN	63	84	104	66	75
JORDAN RIVER						
UTAH LAKE INFLOW, UT	MAY-JUL	250	151	182	120	166
SPANISH FORK						
CASTILLA, UT	MAY-JUL	99	121	140	106	82
PROVO RIVER						
HAILSTONE NR, UT	MAY-JUL	87	93	112	76	94
DEER CREEK RES INFLOW, UT	MAY-JUL	95	98	121	75	97
AMERICAN FORK						
AMERICAN FORK NR, UT	MAY-JUL	32	113	127	102	28
LITTLE COTTONWOOD CREEK						
SALT LAKE CITY NR, UT	MAY-JUL	36	100	108	94	36
BIG COTTONWOOD CREEK						
SALT LAKE CITY NR, UT	MAY-JUL	41	124	133	112	33
MILL CREEK						
SALT LAKE CITY NR, UT	MAY-JUL	6.3	124	135	112	5.1

## STREAMFLOW FORECASTS

STREAM AND STATION	FORECAST PERIOD	FORECASTS THIS YEAR				20 YEAR (1961-80) AVERAGE RUNOFF (1000 AF)
		MOST PROBABLE (1000AF)	(PERCENT OF AVG.)	REASONABLE MAX. (PERCENT OF AVG.)	REASONABLE MIN. (PERCENT OF AVG.)	
GREAT BASIN -- Continued						
PARLEYS CREEK						
SALT LAKE CITY NR, UT	MAY-JUL	13.0	116	143	89	11.2
SIX CREEKS						
SALT LAKE CITY NR, UT	MAY-JUL	105	111	123	100	94
SEVIER RIVER						
HATCH, UT	MAY-JUL	50	121	150	100	42
KINGSTON NR, UT	MAY-JUL	35	154	217	100	22
PIUTE RESERVOIR INFLOW, UT	MAY-JUL	46	138	204	78	33
IN-SIGURD TO GUNNISON, UT	MAY-JUL	85	400	495	315	21
GUNNISON NR, UT	MAY-JUL	100	240			42
EAST FORK SEVIER RIVER						
KINGSTON NR, UT	MAY-JUL	13.0	104	168	64	12.5
BEAVER RIVER						
BEAVER NR, UT	MAY-JUL	23	111	145	77	21
COAL CREEK						
CEDAR CITY NR, UT	MAY-JUL	14.8	96	129	75	15.4
HUMBOLDT RIVER						
PALISADE, NV	APR-JUL	235	102			230
COMUS, NV	APR-JUL	190	110			173
NORTH FORK HUMBOLDT RIVER						
HALLECK NR, NV	APR-JUL	35	100			35
SOUTH FORK HUMBOLDT RIVER						
ELKO NR, NV	APR-JUL	78	104			75
MARTIN CREEK						
PARADISE VALLEY NR, NV	APR-JUL	19	119			16
DONNER UND BLITZEN RIVER						
FRENCHGLEN NR, OR	MAY-JUL	45	107			42
CHEWAUCAN RIVER						
PAISLEY NR, OR	MAR-JUL	85	102	135	70	83
SILVIES RIVER						
BURNS NR, OR	APR-SEP	101	131	186	77	77
DEEP CREEK						
ADEL ABV, OR	MAY-JUL	43	100			43
LITTLE TRUCKEE RIVER						
BOCA ABV, CA	APR-JUL	75	81			93
TRUCKEE RIVER						
LAKE TAHOE INFLOW	APR-JUL	135				170
LAKE TAHOE STAGE RISE	APR-HIGH	1.10	79			1.39
FARAD, CA	APR-JUL	225	84			269
EAST CARSON RIVER						
GARDNERVILLE NR, NV	APR-JUL	165	88			187
WEST CARSON RIVER						
WOODFORDS, CA	APR-JUL	45	85			53
CARSON RIVER						
FORT CHURCHILL NR, NV	APR-JUL	140	84			166
CARSON CITY NR, NV	APR-JUL	150	82			182
EAST WALKER RIVER						
BRIDGEPORT NR, CA	APR-AUG	55	83			66
WEST WALKER RIVER						
L.WALKER BLO COLEVILLE NR, CA	APR-JUL	130	88			148
COLORADO BASIN						
COLORADO RIVER						
LAKE GRANBY INFLOW, CO	APR-SEP	219				
HOT SULPHUR SPRINGS, CO	APR-SEP	430	1			
DOTSERO NR, CO	APR-SEP	17				
GLENWOOD SPRINGS BLO, CO	APR-SEP	2				
CAMEO NR, CO	APR-SEP	2				
CAMEO NR, CO UNADJ	APR-SEP	2				
CISCO NR, UT	APR-JUL	5				
LAKE POWELL INFLOW, AZ	APR-JUL	10				
FRASER RIVER						
WINTER PARK NR, CO	APR-SEP					
WILLIAMS FORK						
PARSHALL NR, CO	APR-SEP					
BLUE RIVER						
DILLON RESERVOIR INFLOW, CO	APR-SEP					
GREEN MOUNTAIN RES IN, CO	APR-SEP					
EAGLE RIVER						
GYPSUM BLO, CO	APR-SEP					
ROARING FORK						
GLENWOOD SPRINGS, CO	APR-SEP					
PLATEAU CREEK						
CAMEO NR, CO	APR-SEP					
TAYLOR RIVER						
TAYLOR PARK RES INFLOW, CO	APR-SEP					
ALMONT, CO	APR-SEP					
GUNNISON RIVER						
BLUE MESA INFLOW, CO	APR-SEP	1				
GRAND JUNCTION NR, CO	APR-SEP	1				
EAST RIVER						
ALMONT, CO	APR-SEP					

## STREAMFLOW FORECASTS

STREAMFLOW FORECASTS		FORECASTS THIS YEAR				20 YEAR (1961-80)
STREAM AND STATION	FORECAST PERIOD	MOST PROBABLE	REASONABLE MAX.	REASONABLE MIN.	AVERAGE RUNOFF	
		(1000AF)	(PERCENT OF AVG.)	(PERCENT OF AVG.)		(PERCENT OF AVG.)
COLORADO -- Continued						
UNCOMPAHGRE RIVER						
COLONA, CO	APR-SEP	170	127	143	114	134
DELTA, CO	APR-SEP	175	136	151	121	129
DOLORES RIVER						
DOLORES, CO	APR-SEP	360	141	161	123	256
SAN MIGUEL RIVER						
NATURITA, CO	APR-SEP	280	167	192	147	168
GREEN RIVER						
WARREN BRIDGE, WY	APR-SEP	261	80	87	72	326
FONTENELLE RES INFLOW, WY	APR-JUL	750	86	100	72	869
GREEN RIVER, WY	APR-SEP	809	75			1079
FLAMING GORGE INFLOW, UT	APR-JUL	1100	88	106	72	1248
GREEN RIVER, UT	APR-JUL	3250	108	127	89	3016
BIG SANDY RIVER						
BIG SANDY NR, WY	APR-SEP	50	82			61
NEW FORK						
BIG PINEY, WY	APR-SEP	300	67	79	57	448
PINE CREEK						
FREMONT LAKE ABV, WY	APR-SEP	100	83	90	77	120
HENRYS FORK						
MANILA, UT	APR-SEP	60	125	154	103	48
YAMPA RIVER						
STEAMBOAT SPRINGS, CO	APR-SEP	300	106	120	91	284
HAYDEN NR, CO	APR-SEP	725	104	119	90	696
MAYBELL NR, CO	APR-SEP	925	97	111	83	956
ELK RIVER						
CLARK, CO	APR-SEP	195	94	106	83	207
LITTLE SNAKE RIVER						
DIXON NR, WY	APR-SEP	294	92			320
LILY NR, CO	APR-SEP	328	92	110	76	357
ASHLEY CREEK						
VERNAL NR, UT	MAY-JUL	60	121	140	105	49
ROCK CREEK						
MOUNTAIN HOME NR, UT	MAY-JUL	94	106	121	94	89
WEST FORK DUCHESNE RIVER						
HANNA, UT	MAY-JUL	27	113	130	102	24
DUCHESNE RIVER						
TABIONA NR, UT	MAY-JUL	100	105	117	93	95
DUCHESNE, UT ABV KNIGHT DIV	MAY-JUL	185	106	120	93	175
MYTON, UT	MAY-JUL	242	131	157	101	185
RANDLETT, UT	MAY-JUL	314	135			233
STRAWBERRY RIVER						
STRAWBERRY RES INF, UT	MAY-JUL	55	129	148	110	43
DUCHESNE, UT	MAY-JUL	58	121			48
STARVATION RES INFLOW, UT	MAY-JUL	58	122	151	97	48
LAKE FORK						
MOON LAKE RES INFLOW, UT	MAY-JUL	74	110	126	95	67
WHITE RIVER						
MEEKER NR, CO	APR-SEP	289	95	108	83	304
WATSON NR, UT	APR-SEP	450	140	154	127	322
UINTA RIVER						
NEOLA NR, UT	MAY-JUL	97	119			81
WHITEROCKS RIVER						
WHITEROCKS NR, UT	MAY-JUL	66	119			56
PRICE RIVER						
SCOFIELD RES INFLOW, UT	MAY-JUL	40	120	138	108	33
COTTONWOOD CREEK						
ORANGEVILLE NR, UT	MAY-JUL	57	132			43
HUNTINGTON CREEK						
HUNTINGTON NR, UT	MAY-JUL	60	136	152	122	44
SAN JUAN RIVER						
PAGOSA SPRINGS, CO	APR-SEP	315	143	158	131	220
NAVAJO RESERVOIR INFLOW, NM	APR-JUL	1300	178	207	155	729
FARMINGTON, NM	APR-SEP	1850	168	196	146	1100
BLUFF NR, UT	APR-JUL	1750	176	207	151	995
PIEDRA RIVER						
ARBOLES NR, CO	APR-SEP	340	151	165	139	225
NAVAJO RIVER						
EDITH, CO	APR-SEP	100	189	215	168	53
LOS PINOS RIVER						
VALLECITO RES INFLOW, CO	APR-SEP	300	137	151	127	219
ANIMAS RIVER						
DURANGO, CO	APR-SEP	650	142	160	127	458
FLORIDA RIVER						
BONDAD NR, CO	APR-SEP	50	134	153	121	37
LA PLATA RIVER						
HESPERUS, CO	APR-SEP	35	133	156	122	26
LITTLE COLORADO RIVER						
LYMAN ABV, AZ						
WOODRUFF, AZ						

# STREAMFLOW FORECASTS

STREAM AND STATION	FORECAST PERIOD	FORECASTS THIS YEAR				20 YEAR (1961-80)
		MOST PROBABLE (1000AF)	REASONABLE MAX. (PERCENT OF AVG.)	REASONABLE MIN. (PERCENT OF AVG.)	REASONABLE MIN. (PERCENT OF AVG.)	AVERAGE RUNOFF (1000 AF)

## COLORADO -- Continued

CHEVELON CREEK						
WINSLOW NR, AZ						
CLEAR CREEK						
WINSLOW NR, AZ						
VIRGIN RIVER						
HURRICANE, UT	MAY-JUN	40	133	193	90	30
GILA RIVER						
GILA NR, NM						
VIRDEN NR, NM						
SOLOMON NR, AZ						
CALVA, AZ						
SAN FRANCISCO RIVER						
GLENWOOD NR, NM						
CLIFTON, AZ						
SALT RIVER						
SALT AT INTAKE, AZ						
ROOSEVELT NR, AZ						
TONTO CREEK						
ROOSEVELT NR, AZ						
VERDE RIVER						
HORSESHOE DAM ABV, AZ						

## RIO GRANDE BASIN

RIO GRANDE						
THIRTY MILE BRIDGE, CO	APR-SEP	189	150	175	105	126
WAGON WHEEL GAP, CO	APR-SEP	435	140	174	105	310
DEL NORTE NR, CO	APR-SEP	745	151	184	105	494
OTOWI BRIDGE, NM	MAR-JUL	1025	171	250	100	600
SAN MARCIAL, NM	MAR-JUL	820	195	302	100	420
SOUTH FORK RIO GRANDE						
SOUTH FORK, CO	APR-SEP	200	157	181	114	127
SAGUACHE CREEK						
SAGUACHE NR, CO	APR-SEP	32	107	167	67	30
ALAMOSA CREEK						
TERRACE RESERVOIR INFLOW, CO	APR-SEP	102	155	182	121	66
CONJOS RIVER						
MOGOTE NR, CO	APR-SEP	302	155	185	113	195
CULEBRA CREEK						
SAN LUIS, CO	APR-SEP	29	161	322	72	18
COSTILLA CREEK						
COSTILLA NR, NM	MAR-JUL	30	160	310	79	19
RED RIVER						
AT MOUTH, QUESTA NR, NM	MAR-JUL	33	110	200	83	30
RIO HONDO						
VALDEZ NR, NM	MAR-JUL	20	133	253	73	11
RIO PUEBLO DE TAOS						
LOS CORDOVAS BLO, NM	MAR-JUL	45	167	252	85	
RIO CHAMA						
EL VADO RES INFLOW, NM	MAR-JUL	320	154			
CHAMITA NR, NM	MAR-JUL	435	164			
RIO OJO CALIENTE						
LA MADERA, NM	MAR-JUL	62	172			
SANTA CRUZ RIVER						
CUNDIYO, NM	MAR-JUL	22				
JEMEZ RIVER						
JEMEZ NR, NM	MAR-JUL					
PECOS RIVER						
PECOS NR, NM	MAR-JUL					
ANTON CHICO NR, NM	MAR-JUL	1				
GALLINAS CREEK						
MONTEZUMA NR, NM	MAR-JUL					

## ARKANSAS

ARKANSAS RIVER						
GRANITE, CO	APR-SEP	1				
SALIDA, CO	APR-SEP	3				
CANON CITY	APR-SEP	3				
PUEBLO ABV, CO	APR-SEP	3				
GRAPE CREEK						
WESTCLIFFE NR, CO	APR-SEP					
HUERFANO RIVER						
REDWING NR, CO	APR-SEP					
CUCHARAS RIVER						
BOYD RANCH, LA VETA NR, CO	APR-SEP					
PURGATOIRE RIVER						
TRINIDAD, CO	APR-SEP					

# STREAMFLOW FORECASTS

STREAM AND STATION	FORECAST PERIOD	FORECASTS THIS YEAR				20 YEAR (1961-80) AVERAGE RUNOFF (1000 AF)
		MOST PROBABLE (1000AF)	(PERCENT OF AVG.)	REASONABLE MAX. (PERCENT OF AVG.)	REASONABLE MIN. (PERCENT OF AVG.)	
MISSOURI BASIN						
RED ROCK RIVER						
MONIDA NR, MT	MAY-SEP	64.5	80			80.7
BEAVERHEAD RIVER						
GRANT, MT	MAY-SEP	97.0	81			120
BARRETTS, MT	MAY-SEP	130	80			162
BIG HOLE RIVER						
MELROSE NR, MT	MAY-SEP	525	78			674
RUBY RIVER						
ALDER NR, MT	MAY-SEP	70.0	76			91.6
MADISON RIVER						
GRAYLING NR, MT	MAY-SEP	370	84			440
MCALLISTER NR, MT	MAY-SEP	620	83			743
GALLATIN RIVER						
GALLATIN GATEWAY NR, MT	MAY-SEP	400	78			514
LOGAN, MT	MAY-SEP	385	71			541
MISSOURI RIVER						
TOSTON, MT	MAY-SEP	1782	81			2200
FORT BENTON, MT	MAY-SEP	2800	81			3440
VIRGELLE, MT	MAY-SEP	3190	81			3960
LANDUSKY NR, MT	MAY-SEP	3580	83			4300
FORT PECK DAM BLO, MT	MAY-SEP	3495	82			4245
LAKE SAKAKAWEA INFLOW, ND	MAY-SEP	8360	77			10855
LITTLE MISSOURI RIVER						
WATFORD CITY NR, ND	FEB-SEP	275	60	91	39	459
SHEEP CREEK						
WHITE SULPHUR SPRINGS, MT	MAY-SEP	17.2	85			20.2
SUN RIVER						
GIBSON RES INFLOW, MT	MAY-SEP	470	87			538
BELT RIVER						
MONARCH NR, MT	MAY-SEP	100	79			126
MARIAS RIVER						
SHELBY NR, MT	MAY-SEP	375	79			473
MUSSELSHELL RIVER						
HARLOWTON, MT	MAY-SEP	67.3	80	139	44	84.1
MILK RIVER						
WESTERN CROSSING, MT	MAR-SEP	32.8	60	101	45	54.7
MILK RIVER, ALBERTA	MAR-SEP	44.8	55	108	37	81.4
EASTERN CROSSING	MAY-SEP	27.7	50	111	33	55.4
YELLOWSTONE RIVER						
YELLOWSTONE LAKE OUTLET, WY	APR-SEP	675	82			825
SPRINGS, MT	MAY-SEP	1600	82			1944
TON NR, MT	MAY-SEP	1800	79			2269
T	MAY-SEP	3217	76			4225
MT	MAY-SEP	4585	73			6273
T	MAY-SEP	4960	72			6921
	MAY-SEP	295	77			385
IT	MAY-SEP	461	76			606
OWSTONE R	MAY-SEP	455	75			606
		85.0	80			106
		890	77			1163
		925	76			1225
		1390	76			1833
		150	70			214
		53.9	69			77.9
		600	71			844
		94.2	60	100	24	157
		38.0	71			123
		155	64	121	28	244
		25.0	62			40.2
		7.0	66			10.6
		154	66	138	26	233
		185	67	144	23	277
		225	86			262
		583	82			710
		653	67			973
		680	68			1001

# STREAMFLOW FORECASTS

STREAM AND STATION	FORECAST PERIOD	FORECASTS THIS YEAR				20 YEAR (1961-80) AVERAGE RUNOFF (1000 AF)
		MOST PROBABLE (1000AF)	(PERCENT OF AVG.)	REASONABLE MAX. (PERCENT OF AVG.)	REASONABLE MIN. (PERCENT OF AVG.)	

## MISSOURI BASIN -- Continued

SWEETWATER RIVER ALCOVA, WY	APR-SEP	33.2	45	69	28	73.7
LARAMIE RIVER WOODS, WY	APR-SEP	110	83			132
SOUTH PLATTE RIVER LAKE GEORGE NR, CO	APR-SEP	45.4	99	169	61	45.9
CHEESMAN LAKE BLO, CO	APR-SEP	94.1	99	176	57	95.1
SOUTH PLATTE, CO	APR-SEP	197	100	159	67	197
NORTH FORK SOUTH PLATTE R SOUTH PLATTE, CO	APR-SEP	80.4	105	144	82	76.6
BEAR CREEK MORRISON, CO	APR-SEP	25.8	90			28.7
CLEAR CREEK GOLDEN NR, CO	APR-SEP	106	83			127
ST. VRAIN CREEK LYONS, CO	APR-SEP	55.0	70			78.8
MIDDLE BOULDER CREEK NEDERLAND, CO	APR-SEP	30.0	82	108	71	36.5
SOUTH BOULDER CREEK ELDORADO SPRINGS NR, CO	APR-SEP	36.1	86	131	73	42.1
BIG THOMPSON RIVER ESTES PARK, CO	APR-SEP	66.3	85	110	79	78.0
DRAKE, CO	APR-SEP	97.0	85			114
CACHE LA POUDE RIVER FT. COLLINS NR, CO	APR-SEP	230	86			268

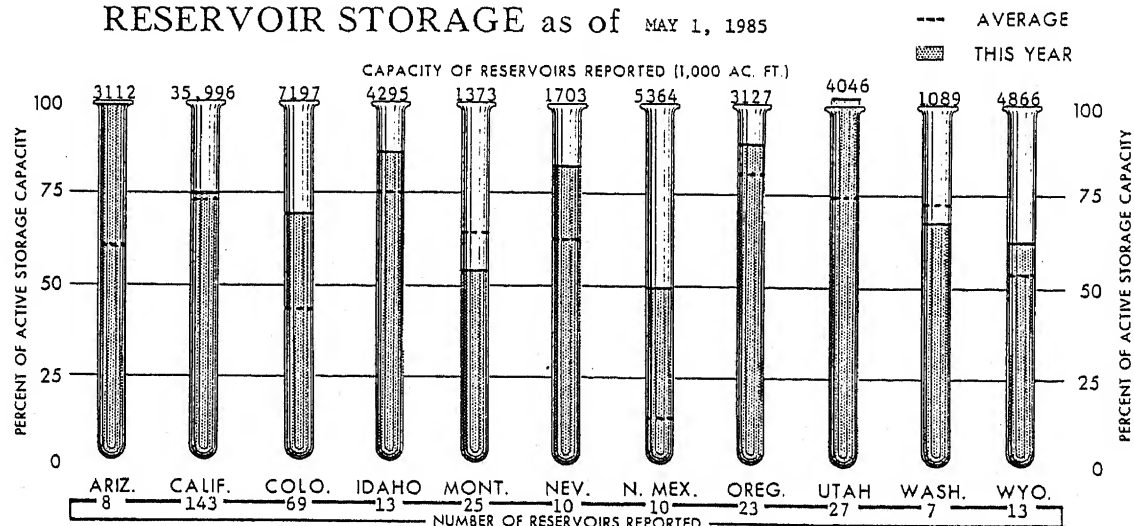
## SASKATCHEWAN BASIN

ST. MARY RIVER BABB NR, MT	MAY-SEP	432	93			465
-------------------------------	---------	-----	----	--	--	-----

## ALASKA

YUKON RIVER EAGLE, AK	APR-JUL	44960	126			35790
STEVENS VILLAGE, AK	APR-JUL	57800	120			48330
SALCHA RIVER SALCHAKET NR, AK	APR-JUL	880	124			708
CHENA RIVER FAIRBANKS, AK	APR-JUL	650	121			535
LITTLE CHENA RIVER FAIRBANKS, AK	APR-JUL	101	125			81
SHIP CREEK ANCHORAGE NR, AK	APR-JUL	64	103			62
N.F. CAMPBELL CREEK ANCHORAGE NR, AK	APR-JUL	4.6	96			4.8
ANCHOR RIVER ANCHOR POINT NR, AK	APR-JUL	75.5	93			81
LITTLE SUSITNA RIVER PALMER NR, AK	APR-JUL	114	124			92
SUSITNA RIVER GOLD CREEK, AK	APR-SEP	6627	112			5919
TERROR RESERVOIR INFLOW KODIAK ISLAND, AK	MAY-SEP	45.2	80			56.5

## RESERVOIR STORAGE as of MAY 1, 1985



UNITED STATES DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL WEATHER SERVICE  
220 N.W. 8th., ROOM 121  
PORTLAND, OREGON 97209

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

FIRST CLASS MAIL  
POSTAGE & FEES PAID  
NOAA  
PERMIT NO. G-19

US GOVERNMENT PRINTING  
OFFICE LIBRARY  
5236 EISENHOWER AVE  
ALEXANDRIA VA 22304

---

ADDITIONAL INFORMATION MAY BE OBTAINED FROM THE FOLLOWING LOCATIONS

**SOIL CONSERVATION SERVICE**

State Snow Survey Supervisors

Room 129, 2221 E. Northern Lights Blvd., Anchorage, AK 95508  
201 E. Indianola, Suite 200, Phoenix, AZ 85012  
2490 W. 26th Ave., Bldg. A, 3rd Floor, Denver, CO 80211 (Includes New Mexico)  
Room 345, 304 N. 8th St., Boise, ID 83702  
10 E. Babcock, Room 443, Fed. Bldg., Bozeman, MT 59715  
50 South Virginia St., Reno, NV 89505  
1220 S.W. Third Ave., Portland, OR 97204  
4420 Fed. Bldg., 125 So. State ST., Salt Lake City, UT 84138  
360 U.S. Courthouse, Spokane, WA 99201  
100 E. "B" St., Casper, WY 82601

**NATIONAL WEATHER SERVICE**

River Forecast Center Offices

Fed. Bldg. & Courthouse, 701 C St., Box 23, Anchorage, AK 99513  
819 Taylor St., Rm. 10A02, Fort Worth, TX 76102  
Rm. 1715A, 601 E. 12th St., Kansas City, MO 64106  
121 Customhouse, Portland, OR 97209  
1641 Resources Building, 1416 - 9th St., Sacramento, CA 95814  
337 No. 2730 West, Executive Terminal Bldg., Salt Lake City, UT 84116  
Room 201, General Aviation Bldg., International Airport, Tulsa, OK 74115